REMARKS/ARGUMENTS

In view of the foregoing amendments and the following remarks, the applicants respectfully submit that the pending claims comply with 35 U.S.C. § 112 and are not anticipated under 35 U.S.C. § 102. Accordingly, it is believed that this application is in condition for allowance. **If, however, the Examiner believes that there are any unresolved issues, or believes that some or all of the claims are not in condition for allowance, the applicants respectfully request that the Examiner contact the undersigned to schedule a telephone Examiner Interview before any further actions on the merits.**

The applicants will now address each of the issues raised in the outstanding Office Action. Before doing so, however, both the undersigned and John Pokotylo would like to thank Examiner Brandenburg for courtesies extended during a telephone interview on November 19, 2009 (referred to as "the telephone interview"). The telephone interview is summarized here.

Telephone Interview Summary

This statement of the substance of the Interview summarizes the issues discussed during the November 19, 2009 telephone interview. This Interview Summary is presented in the format suggested in MPEP § 713.04 by the Patent Office.

Date of Interview: November 19, 2009

Type of Interview: Telephone

Name of Participants:

- Examiner: William Brandenburg

- For Applicants: John C. Pokotylo
  Len Linardakis

A. Exhibit(s) Shown: None

B. Claims discussed: 23, 28, 77 and 81-83

C. References Discussed:

- U.S. Patent Application Publication No. 2003/0055816 ("the Paine publication")
- U.S. Patent No. 7,035,812 ("the Meisel patent")

D. Proposed Amendments discussed:

The applicants' representatives discussed proposed amendments to these claims (combining claims 23 with claim 77, and claim 26 with claim 77), their understanding of the teachings of the Paine reference, and differences between the claimed invention, as amended, and the teachings of the cited reference.

E. Discussion of General Thrust of the Principal Arguments

- The applicants' representatives discussed the Examiner's restriction requirement of dependent claims 81-83 under 35 U.S.C § 121. Specifically, the applicants' representatives presented arguments why they believe the restriction requirement is improper in view of MPEP 806.05(c) (cited in original restriction requirement in Paper No. 20080402).

- The applicants' representatives discussed the Examiner's § 102 rejection of independent claims 23 and 26. Specifically, the applicants' representatives discussed proposed amendments to these claims (combining claim 23 with claim 77, and claim 26 with claim 77), their understanding of the teachings of the Paine reference, and differences between the claimed invention, as amended, and the teachings of the cited reference.

- The applicants' representatives discussed the Examiner's § 102 rejection of independent claim 28. Specifically, the applicants' representatives discussed their understanding of the teachings of the Meisel reference, and differences between the claimed invention and the teachings of the cited reference.

F. Other Pertinent Matters Discussed: None

G. General Results/Outcome of Interview

- The Examiner stated that he would discuss the propriety of the restriction requirement with his supervisor.

- The Examiner indicated that he would have to further consider the references in light of the aforementioned proposed amendments to the claims.

Restriction under 35 U.S.C. § 121

Claims 81-83 are restricted under 35 U.S.C. § 121 and have been constructively withdrawn by the Examiner. The

applicants respectfully traverse the Examiner's restriction requirement and constructive election.

In restricting claims 81-83, the Examiner states:

> 4. Newly submitted claims 81-83 are directed towards nonelected, cancelled claims, as admitted on the record by the Applicant on page 25 of the Remarks. ***These claims are directed to the same subject matter that was the basis for a previous Restriction Requirement mailed on 04/08/2008 and were cancelled as part of the Applicant's Election filed on 05/09/2008***. As such, these claims are restricted from the other pending claims and will not be examined in the rejection below. [Emphasis added.]

(Paper No. 200907, page 4) In the original restriction requirement in Paper No. 20080402, the Examiner states:

> 2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (***MPEP § 806.05(c)***). In the instant case, ***the combination as claimed does not require the particulars of the subcombination as claimed*** because the limitations of the subcombination claims for determining concept representations and scoring is not required for the patentability of the limitations of the combination claims for determining similarity between advertisements and concept requests. The subcombination has separate utility such as allowing an advertiser to specifically tailor the concept representation and adjust

> scores via performance information to ensure advertisement effectiveness. [Emphasis added.]

(Paper No. 20080402, page 2) The applicants respectfully disagree and believe the restriction requirement is improper in view of MPEP 806.05(c)II.

Dependent claim 81, as amended, directly depends from independent claim 23. Specifically, claim 23 recites a method which determines, for example, a candidate concept from accepted ad information, presents the determined concept to an advertiser, adjusts the values associated with the determined concept using advertiser feedback, and controls the serving of the ad based on the adjusted concept value. In this scenario, using the notation from MPEP 806.05(c), the features of claim 23 would be represented by ABbr (br = broad), where Bbr denotes the act of controlling the serving of the ad using the adjusted concept value. Meanwhile, claim 81, as amended, further recites details regarding how the serving of the ad is controlled using the adjusted concept value. Thus, the features of claim 81 would be donated by Bsp (sp = specific). However, for a restriction to be proper under the Examiner's analysis, MPEP 806.05(c)II states that the subcombination (in this case claim 81) must be ***separately claimed***. Specifically, MPEP 806.05(c)II provides:

> Where a combination as claimed does not **>require< the details of the subcombination as ***separately claimed*** and the subcombination has separate utility, the inventions are distinct and restriction is proper if reasons exist for insisting upon the

> restriction, i.e., there would be a serious search burden >if restriction were not required< as evidenced by separate classification, status, or field of search. [Italics in original, bold and underline added.]

As stated above the features of claim 81 are ***not separately claimed***, but rather, claim 81, as amended, depends from claim 23. Thus, the applicants' respectfully submit that the restriction is improper. Since claim 82 depends from claims 26 and 79, and claim 83 depends from claims 28 and 80, the restriction of these claims is similarly improper.

In view of the foregoing, the applicants respectfully request that the Examiner also examine (constructively) non-elected claims 81-83.

Rejections under 35 U.S.C. § 112

Claims 23 and 60 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for lack of antecedent basis of a recited element. Since claims 23 and 60 have been amended to ensure proper antecedent basis for all recited elements, the applicants respectfully request that the Examiner reconsider and withdraw this ground of rejection.

Rejections under 35 U.S.C. § 102

Claims 23-26, 60-63, 75-78, 84 and 85 are rejected under 35 U.S.C. § 102(a) and 102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0055816 ("the Paine publication"). The applicants respectfully

request that the Examiner reconsider and withdraw this ground of rejection in view of the following.

First, since claims 77 and 78 have been canceled, this ground of rejection is rendered moot with respect to these claims.

Second, independent claims 23 and 60 have been amended to include the features of dependent claim 77 (now canceled) to recite that ***the adjusted value*** associated with the at least one of (1) a candidate concept and (2) a candidate concept indicator ***is used to control serving of the ad.*** Independent claims 26 and 63 have been similarly amended. These amendments are supported, for example, by original claims 22, 59 and 77 (now canceled), page 15, lines 11-23, page 17, lines 23-32, and page 18, line 10 through page 25, line 13.

Independent claims 23 and 60, as amended, are not anticipated by even the Examiner's characterization of the Paine publication at least because the Paine publication does not teach that ***the adjusted value*** associated with the at least one of (1) a candidate concept and (2) a candidate concept indicator ***is used to control serving of the ad.*** In rejecting the features of claim 77 (now canceled), the Examiner states:

> f) using the adjusted value associated with the at least one of (1) a candidate concept and (2) a candidate concept indicator to control the serving of the ad ([0086], advertiser selects search terms from provided list, see also [0100-101], based on advertiser refining list of search terms the advertiser correlation is changed and certain terms are no longer recommended to the advertiser, see also

> [0107-108], [0132], weighting and ratings of search terms change as the advertiser accepts and rejects terms, see also [0112], once advertiser is satisfied with search terms accepted the terms are stored) (***The Examiner understands that the terms finally accepted by the advertiser control the serving of the ad (i.e. the accepted terms are used to return search results based on an appropriate search query***). [Emphasis added.]

(Paper No. 200907, pages 17 and 18) The applicants respectfully disagree.

Exemplary embodiments consistent with the claimed invention:

> may use at least one or more ad targeting concepts to (a) ***determine or help determine whether or not an ad is eligible to be served*** (e.g., in association with a particular document), and/or (b) determine or help determine a score of an ad. The present invention ***may do so by determining, for a number of candidate ads, a similarity of an ad targeting concept representation and a request and/or document concept representation.*** Exemplary techniques for doing this are described in § 4.2.1 below. The similarity determination presumes that ads have associated concepts and requests and/or documents have associated concepts. The present invention also describes techniques for generating representations of such targeting concepts and concepts. ***Such techniques are described in § 4.2.2 below.*** Both phases -- concept representation generation and concept similarity determination -- are introduced below with reference to Figure 4. [Emphasis added.]

(Page 15, lines 11-23 of the present application) As can be appreciated from the foregoing, exemplary embodiments consistent with the claimed invention determine whether or not an ad is eligible to be served (e.g., control the serving of the ad) using a similarity between ad concepts and request concepts. Ad concepts have associated values which may be adjusted based on advertiser feedback as described in § 4.2.2 and Figure 7 of the specification. In determining the similarity, the specification provides:

> The concepts associated with the ad targeting criteria may be represented by vector C_{TARGET}. Each of the elements of this vector may identify a concept and a score (e.g., on the scale of -1 to 1).
>
> .
> .
> .
>
> In one embodiment, the concepts associated with the request/requested document are represented by vector $C_{REQUEST}$. Each of the elements of this vector identify a concept, and a score (e.g., on the scale of -1 to 1).
>
> For concept vectors with independent terms, a similarity score S can be computed from the dot product of concept vectors C_{TARGET} and $C_{REQUEST}$ using the following:
>
> $S = \text{Limit-to-unity}\{ K * (C_{TARGET} * C_{REQUEST}) / \text{sqrt}(||C_{TARGET}|| * ||C_{REQUEST}||) \}$
>
> The magnitude of this similarity score S reflects strength of the match. "K" is a scaling factor that may be adjusted to get a reasonable graduation of scores in the range of 0-1. This may be necessary for thresholding (for inclusion) to be effective. In the

> vector cross product, strong correlations and strong anti-correlations tend to cancel each other out. The square root may be some other power.

(Page 18, line 19 through page 19, line 15 of the present application) As can be appreciated from the foregoing, after ***the values associated with a candidate concept*** of an ad are adjusted based on advertiser feedback, those ***adjusted values are used*** in conjunction with values associated with the request ***to control serving of the ad***.

By contrast, the Paine reference does not describe using the adjusted weighting and ratings of search terms as described in paragraphs [0107] and [0108] of the Paine publication ***to control serving of the ad***. Although the Examiner "understands that the terms finally accepted by the advertiser control the serving of the ad", nowhere does the Paine publication describe ***using the adjusted weights*** of the finally accepted terms for anything other than ***providing a list of search term recommendations*** to an advertiser. Thus, independent claims 23 and 60 are not anticipated by the Paine publication for at least this reason.

During the telephone interview, the Examiner recommended that the applicants clarify ***how*** the adjusted values of the ad concepts where used to control the serving of the ad in order to more clearly distinguish the claimed invention from the cited reference. The applicants respectfully submit that dependent claim 81 (currently restricted), as amended, clarifies ***how*** the adjusted value of an ad concept, in combination with the value of a request (e.g., dot product between the vectors

representing each concept), is used to control the serving of the ad.

Thus, in view of the foregoing amendments and remarks, independent claims 23 and 60 are not anticipated by the Paine publication. Independent claims 26 and 63 are similarly not anticipated by the Paine publication. Since claims 24, 25, 75, 76, 81 and 84 directly or indirectly depend from claim 23, since claim 85 depends from claim 26, and since claims 61 and 62 depend from claim 60, these claims are similarly not anticipated by the Paine publication.

Claims 28-37, 65-74, 79, 80, 86 and 87 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,035,812 ("the Meisel patent"). The applicants respectfully request that the Examiner reconsider and withdraw this ground of rejection in view of the following.

Independent claims 28 and 65 are not anticipated by the Meisel patent at least because the Meisel patent does not teach ***determining at least one concept having an associated value using accepted request information***, and generating a representation of the determined at least one concept, wherein associated with the determined concept in the generated representation is adjusted using performance information of advertisements that have been served pursuant to the concept. In rejecting claim 28, the Examiner cites column 9, lines 55-60, column 15, line 39 through column 17, line 19, and column 16, line 9 through column 18, line 13 of the Meisel patent as teaching the aforementioned features. (See Paper No. 200907, page 21.) The applicants respectfully disagree.

In general, the Meisel patent describes a system for "enabling information providers to influence a position for a search listing within a search result list" by adjusting the bid amounts. (See Abstract of the Meisel patent.) More specifically, the portion of the Meisel patent cited by the Examiner provides:

> The search engine web server 24 generates a list of hypertext links to documents that contain information relevant to search terms entered by the user or by the system at the client computer 12. The search engine web server transmits this list, in the form of a web page, to the network user, where it is displayed on the browser 16 running on the client computer 12.

(Column 9, lines 54-60 of the Meisel patent) The Examiner contends that hyperlinks returned in response to a search query in the Meisel patent teach "determining concepts". (See Paper No. 200907, page 14.) The applications respectfully disagree.

Determining hyperlinks in response to a search query in the Meisel patent does not teach ***determining at least one concept having an associated value*** using the request information. Embodiments consistent with the claimed invention ***help resolve ambiguities with respect to ads served using keyword targeting***. Specifically, the specification provides:

> As another example, the query term "jaguar" could refer to the car by that name, the animal by that name, the NFL football team by that name, etc. ***If the user is interested in the animal, then the user might***

> ***not** be interested in search results or advertisements which pertain to the car or NFL football team.*
> [Emphasis added.]

(Page 4, line 30 through page 5, line 4) Embodiments consistent with the claimed invention may overcome the above-described problem by determining ***concepts, each concept having an associated value (i.e., score)*** which may be associated with the concept determined. More specifically, the present application describes a "concept" as a "***representation of meaning that can be determined from a word and/or by analyzing a sequence of word searches and/or actions as the result of word searches.***" (Page 14, lines 21-23 of the present application) The specification further provides:

> ***Examples of concepts include*** (a) open directory project ("ODP") categories, (b) clusters (such as phil clusters described in U.S. Provisional Application Serial No. 60/416,144 (incorporated herein by reference), titled "Methods and Apparatus for Probabilistic Hierarchical Inferential Learner" filed on October 3, 2002), ***context information***, (such as semantic context vectors described in U.S. Patent Application Serial No. 10/419,692 (incorporated herein by reference), titled "DETERMINING CONTEXTUAL INFORMATION FOR ADVERTISEMENTS AND USING SUCH DETERMINED CONTEXTUAL INFORMATION TO SUGGEST TARGETING CRITERIA AND/OR IN THE SERVING OF ADVERTISEMENTS," filed on April 21, 2003, and listing Amit Singhal, Mehran Sahami, Amit Patel and Steve Lawrence as inventors), etc.
> [Emphasis added.]

(Page 14, line 26 through page 15, line 5) Since a search query (for example, "jaguar") can have various meanings depending on the context in which it is used, it is only by ***determining the context*** (i.e., ***determining concepts***) in which the keyword is used that ambiguities with respect to ads served using keyword targeting can be resolved. Specifically, the Meisel patent does not ***determine concepts*** (which may be used to resolve ambiguities surrounding search keywords) using accepted request information ***(e.g., determining the context of the user request).***

During the telephone interview the Examiner suggested amending the claims to clarify that the concepts include contextual information which would help distinguish the claims from the cited reference. In addition, during the telephone interview, the Examiner noted that the recited "value" is very broad and can be interpreted to be any rank value or arbitrarily assigned value as claimed. The Examiner suggested clarifying the recited value and what it represents.

Claims 28 and 65 have been amended to clarify that the at least one concept include context information, and wherein the value associated with the concept is determined based on the similarity between the determined concept and the request information. These amendments are supported, for example, by § 4.2.1.1.1, § 4.3, page 14, line 26 through page 15, line 5 and Figures 12A-12C of the present application. The Meisel patent does not teach ***determining concepts which include context information*** and ***adjusting concepts values determined based on the similarity between the determined concept and the request information.***

Thus, in view of the foregoing remarks and amendments, claims 28 and 65 are not anticipated by the Meisel patent. Independent claims 32 and 69, as amended, are similarly not anticipated by the Meisel patent. Since claims 29-31, 79, 82 and 86 directly or indirectly depend from claim 28, since claims 33-37, 80, 83 and 87 depend directly or indirectly from claim 32, since claims 66-68 depend from claim 65, and since claims 70-74 depend from claim 69 these claims are similarly not anticipated by the Meisel patent.

Conclusion

In view of the foregoing amendments and remarks, the applicants respectfully submit that the pending claims are in condition for allowance. Accordingly, the applicants request that the Examiner pass this application to issue.

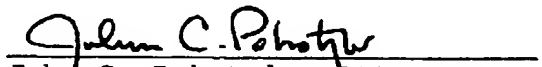
Any arguments made in this amendment pertain ***only*** to the specific aspects of the invention ***claimed***. Any claim amendments or cancellations, and any arguments, are made ***without prejudice to, or disclaimer of***, the applicants' right to seek patent protection of any unclaimed (e.g., narrower, broader, different) subject matter, such as by way of a continuation or divisional patent application for example.

Since the applicants' remarks, amendments, and/or filings with respect to the Examiner's objections and/or rejections are sufficient to overcome these objections and/or rejections, the applicants' silence as to assertions by the Examiner in the Office Action and/or to certain facts or conclusions that may be implied by

objections and/or rejections in the Office Action (such as, for example, whether a reference constitutes prior art, whether references have been properly combined or modified, whether dependent claims are separately patentable, etc.) is not a concession by the applicants that such assertions and/or implications are accurate, and that all requirements for an objection and/or a rejection have been met. Thus, the applicants reserve the right to analyze and dispute any such assertions and implications in the future.

Respectfully submitted,

December 14, 2009



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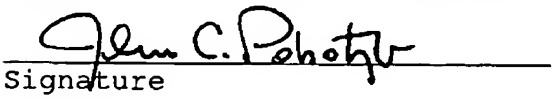

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